

Appl. No. 09/821,848
Attorney Docket No.: 2001A001
Amdt. Filed With RCE

REMARKS/ARGUMENTS

Claim Amendments

By the claim amendments presented, Claims 2-3, 10-12, 15-16, and 23-25 are newly canceled herein without prejudice. Claims 27 and 34 had been previously canceled prior to the filing of the accompanying RCE.

Upon entry of the amendments presented, Claims 1, 4-9, 13-14, 17-22, 26, 28-33 and 35-85 remain in the application. No additional claims fee is due as a result of these amendments.

Invention Synopsis

The present invention as currently claimed in this application is directed to a method for fabricating a plurality of material systems. The method comprises providing at least first and second material system components, mixing these components to form an intermixed material system composition, depositing the intermixed material system composition onto a substrate or forming it into some other specified configuration, and analyzing at least one material property of the intermixed material system composition. A material property of at least one of the system components is varied on real time basis prior to the intermixing, such that the material system composition comprises a first composition at a first time and a second material system composition at a second time. Specific preferred invention embodiments which are claimed provide various preferred deposition techniques and types of systems which are fabricated.

Art Rejection

During pre-RCE prosecution, all of the application claims were finally rejected under 35 USC §103(a) as being allegedly unpatentably obvious over Schultz et al. (U.S. Patent No. 5,985,356, hereinafter "Schultz") in view of Wildpaner (U.S. Patent No. 3,835,873) and Jorre et al. (U.S. Patent No. 3,359,784, hereinafter "Jorre"). In the Final Rejection, the Examiner contended that it would have been obvious to modify the process of Schultz by adding the analytical, monitoring and adjusting features disclosed in the newly cited secondary references, to thereby arrive at applicants' invention. Such a rejection is respectfully traversed as it would apply to the claims remaining in the application.

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By way of review, Schultz discloses preparation of a substrate having an array of diverse materials in predefined regions on the substrate. The Schultz substrate is prepared by delivering components (reactants) to the substrate regions and simultaneously reacting the components to form different materials in at least two different regions. By varying the amounts of individual reactants deposited from one region to another region, different materials can be formed on the substrate. Schultz does not disclose the real time monitoring and analysis of the material system compositions, along with the real time variation of the component in component mixtures to create different material system compositions at different times.

Wildpaner is directed to a method of producing a mixture with a constant component composition from a plurality of starting materials. This is accomplished by analyzing the component-containing starting materials with an X-ray fluorescence process so that appropriate amounts of starting materials can be used to keep the end-resulting composition constant. The Jorre reference is directed to a set up for testing the drift of analytical instruments used to monitor components of a gas from a blast furnace so as to better maintain desired conditions in the blast furnace.

It is respectfully submitted that both the Wildpaner and Jorre patents are quite non-analogous art references, both with respect to the Schultz primary reference and to the subject matter of the present invention. In Waldpaner, there is, in fact, no chemical reaction taking place, and there is no objective in Waldpaner to alter composition character in real time based on any kind of analysis. Jorre is likewise unrelated in both subject matter and objective with respect to the present invention. Jorre does not measure a property on a real time basis for the purpose of altering mixed components during a providing step to provide two different compositions, as is the instant invention. Jorre furthermore is completely unrelated to the deposition of any material systems onto substrates or to the forming of such compositions into any of the other configurations claimed in the present application.

In short, in the instant invention, the elements of "analyzing of at least one material property" and "wherein a material property is varied on a real time basis" are provided so that the analyzing and the variation are carried out on purpose to have more than one composition formed. Analyzing and variation are not done in the claimed process to calibrate instrumentation or to alter components so that a composition containing any such component will remain

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constant. Yet this is what the secondary references would suggest. Thus, neither the primary reference, the secondary references nor their combination would suggest all of the elements of the combinatorial synthesis methods as claimed herein.

Given the foregoing considerations, it is submitted that the reference combination of Schultz in view of Waldpaner and Jorre is not one which is properly made in rejection of applicants' claims in the first place. And even if made, the combined teachings of these three patents still do not suggest the particular process embodiments set forth in applicants' claims as presently written. Continued rejection of these claims under 35 USC §103(a) over the applied reference matrix would therefore be improper.

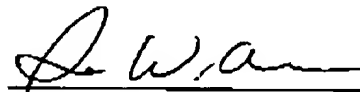
CONCLUSIONS

Applicants have made an earnest effort to place their application in proper form and to distinguish their claimed invention from the applied prior art. WHEREFORE, entry of the amendments presented herein, consideration of Applicants' remarks concerning the newly applied art rejection, as well as allowance of Claims 1, 4-9, 13-14, 17-22, 26, 28-33 and 35-85, are all respectfully requested.

Any comments or questions concerning the application can be directed to the undersigned at the telephone number given below

Respectfully submitted,

Date: 4/11/06



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